High Velocity Hurricane Zone Uniform Permit Application Form.

SECTION A (General Information)

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Section c (Low Sloped Roof System)

Fill in Specific Roof Assembly Components Fastener Spacing for Anchor/Bas Sheet and Identify Manufacturer Attachment (If a component is not used, Identify as "N/A") oc @ Lap, # Rows " oc Field Perimeter oc @ Lap, # Rows System Manufacturer: NOA No.: oc @ Lap, # Rows Corner @ Design Wind Pressures, From RAS 128 or Calculations: Pmax2: Pmax1: Pmax3: Number of Fasteners Per Insulation Board Maximum Design Pressure, From the Specific NOA System: Field Perimeter Deck: Illustrate Components Noted and Details as Type: Applicable: Gauge/Thickness: Woodblocking, Gutter, Edge Termination, Stripping, Flashing, Slope: Continuous Cleat, Cant Strip, Base Flashing, Counter-Flashing, Coping, Anchor/Base Sheet & No of Ply(s): Indicate: Mean Roof Height, Parapet Height, Height of Base Flashing, Anchor/Base Sheet Fastener. Bonding Material: Component Material, Material Thickness, Fastening Type, Fastener Spacing or Submit Manufacturers Details that Comply with RAS 111 and Insulation Base Layer: Base Insulation Size & Thickness: Base Insulation Fastener/Bonding Material: Top Insulation Layer: FT. Top Insulation Size and Thickness: Top Insulation Fastener/Bonding Material: **Parapet** Height Base Sheet(s) & No. of Ply(s): Base Sheet Fastener/Bonding Material: FT. Ply Sheet(s) & No. of Ply(s): Mean Roof Ply Sheet Fastener/Bonding Material: Height Top Ply: Top Ply Fastener/Bonding Material: Surfacing:

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Section D (Steep Slope Roof System)

Roof System Manufacturer:									
Notice of Acceptance Number:									
Minimum Design Wind Pressures, If Applicable (From RAS 127 or Calculations):									
P1: P1: P1:									
Maximum Design Pressure (From the NOA Specific System):									
Method of Tile Attachment:									

Steep Slope Roof System Description

	Deck Type:
	Type Underlayment:
Roof Slope:	Insulation:
: 12	Fire Barrier:
Ridge Vent	Fasterner Type & Spacing: Adhesive Type:
	Type Cap Sheet:
M	ean Roof Height: Roof Covereing: Type & Size Drip Edge:

High Velocity Hurricane Zone Uniform Permit Application Form.

Section D (Steep Slope Roof System)

Roof System Manufacturer:									
Notice of Acceptance Number:									
Minimum Design Wind Pressures, If Applicable (From RAS 127 or Calculations):									
P1: P1: P1:									
Maximum Design Pressure (From the NOA Specific System):									
Method of Tile Attachment:									

Steep Slope Roof System Description

	Deck Type:
	Type Underlayment:
Roof Slope:	Insulation:
: 12	Fire Barrier:
Ridge Vent	Fasterner Type & Spacing: Adhesive Type:
	Type Cap Sheet:
M	ean Roof Height: Roof Covereing: Type & Size Drip Edge:

High Velocity Hurricane Zone Uniform Permit Application Form.

Section E (Tile Calculations)

For Moment based tile systems, choose wither Method 1 or 2. Compare the values for M_f , with the values from M_f . If the M_f values are greater that or equal to the M_r values, for each area of roof, then the tile attachment method is acceptable.

Method 1	"Moment Based	Tile Calculations	Per RAS 127"

(P1:	X 1	equals)	minus	Mg:	equals	Mr1	NOA	Mf	
(P2:	x 1	equals)	minus	Mg:	equals	Mr1	NOA	Mf	
(P3:	X 1	equals)	minus	Mg:	equals	Mr1	NOA	Mf	

Method 2 "Simplified Tile Calculation Per Table Below"

Required Moment of Resisitance (Mr) From below: NOA Mf

Mr Required Moment Resistence*

Mean Roof Height → Roof Slope	15'	20'	25'	30'	40'
2:12	30.7	33.4	35.7	37.7	40.7
3:12	28.7	31.3	33.4	35.2	38.1
4:12	26.6	28.9	30.9	32.6	35.2
5:12	24.5	26.7	28.5	30.0	32.5
6:12	22.5	24.5	26.2	27.6	29.8
7:12	20.8	22.6	24.1	25.4	27.5

^{*} Must be used in conjunction with a list of moments based tile system endorsed by the Broward County Board of Rules and Appeals.

For Uplift based tile system use Method 3. Compared the values for F' with the values for Fr. If the F' value are greater that or equal to the Fr values, for each area of the roof, then the tile attachment method is acceptable.

Method 3 "Uplift Based Tile Calculations Per RAS 127"

(P1:	X I:	equals	X w:	equals) י	minus W:	X	cos	q:	equals	Fr1:	NOA F'
(P2:	X I:	equals	X w:	equals) '	minus W:	x	cos	q:	equals	Fr1:	NOA F'
(P3:	X I:	equals	X w:	equals	<u> </u>	minus W:	X	cos	q: _	equals	Fr1:	NOA F'

	Whe	re to Obtain Information						
DESCRIPTION SYMBOL WHERE TO FIND								
Design Pressure	P1, P2 or P3	RAS 127 Table 1 or by an engineering analysis prepared by PE based on ASCE 7						
Mean Roof Height	Н	Job Site						
Roof Slope	q	Job Site						
Aerodynamic Multiplier	1	NOA						
Restoring Moment due to Gravity	Mg	NOA						
Attachment Resistance	Mf	NOA						
Required Moment Resistance	Mr	Calculated						
Minimum Attachment Resistance	F'	NOA						
Required Uplift Resistance	Fr	Calculated						
Average Tile Weight	W	NOA						
Tile Dimensione	I = length	NOA						
Tile Dimensions	w = width	NOA						
All calculations	nust be submitte	d to the Building Official at the time of permit application.						

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Section E (Tile Calculations)

For Moment based tile systems, choose wither Method 1 or 2. Compare the values for M_f , with the values from M_f . If the M_f values are greater that or equal to the M_r values, for each area of roof, then the tile attachment method is acceptable.

Method 1	"Moment Based	Tile Calculations	Per RAS 127"

(P1:	X 1	equals)	minus	Mg:	equals	Mr1	NOA	Mf	
(P2:	x 1	equals)	minus	Mg:	equals	Mr1	NOA	Mf	
(P3:	X 1	equals)	minus	Mg:	equals	Mr1	NOA	Mf	

Method 2 "Simplified Tile Calculation Per Table Below"

Required Moment of Resisitance (Mr) From below: NOA Mf

Mr Required Moment Resistence*

Mean Roof Height → Roof Slope	15'	20'	25'	30'	40'
2:12	30.7	33.4	35.7	37.7	40.7
3:12	28.7	31.3	33.4	35.2	38.1
4:12	26.6	28.9	30.9	32.6	35.2
5:12	24.5	26.7	28.5	30.0	32.5
6:12	22.5	24.5	26.2	27.6	29.8
7:12	20.8	22.6	24.1	25.4	27.5

^{*} Must be used in conjunction with a list of moments based tile system endorsed by the Broward County Board of Rules and Appeals.

For Uplift based tile system use Method 3. Compared the values for F' with the values for Fr. If the F' value are greater that or equal to the Fr values, for each area of the roof, then the tile attachment method is acceptable.

Method 3 "Uplift Based Tile Calculations Per RAS 127"

(P1:	X I:	equals	X w:	equals) mi	inus W:	X c	cos q:_	equals	Fr1:	NOA F'	
(P2:	X I:	equals	X w:	equals) mi	inus W:	ХС	cos q:	equals	Fr1:	NOA F'	
(P3:	X I:	equals	X w:	equals) mi	inus W:	X c	cos q:	equals	Fr1:	NOA F'	

	Whe	re to Obtain Information	
DESCRIPTION	SYMBOL	WHERE TO FIND	
Design Pressure	P1, P2 or P3	RAS 127 Table 1 or by an engineering analysis prepared by PE based on ASCE 7	
Mean Roof Height	Н	Job Site	
Roof Slope	q	Job Site	
Aerodynamic Multiplier	1	NOA	
Restoring Moment due to Gravity	Mg	NOA	
Attachment Resistance	Mf	NOA	
Required Moment Resistance	Mr	Calculated	
Minimum Attachment Resistance	F'	NOA	
Required Uplift Resistance	Fr	Calculated	
Average Tile Weight	W	NOA	
T11. B	I = length	NOA	
Tile Dimensions	w = width	INOA	
All calculations	nust be submitte	d to the Building Official at the time of permit application.	